WHAT IS CLAIMED IS:

1. A reactor, comprising:

at least one enclosure configured to hold material to be transformed under heat;

at least one heating element configured to supply the heat;

a container that houses the at least one enclosure and the at least one heating element, the container including an open end, a frame that bounds the open end, and a door that is configured to hermetically seal the open end in response to forces exerted on the door that press the door against the frame, the open end being of a dimension to accommodate passage of the enclosure in tact through the open end;

a discharge port configured to open and close; and

an incline that slopes to the discharge port beneath the enclosure.

2. A reactor as in claim 1, further comprising a heat recovery section surrounding at least a portion of the container, the heat recovery section including a reservoir of water.

3. A reactor as in claim 1, further comprising sensors and a heating control configured to control a temperature within the container for periods of time and at levels consistent with that required for transforming wood into wood charcoal.

4. A reactor as in claim 1, wherein the incline is part of the enclosure.

5. A reactor as in claim 1, wherein the incline is separate from the enclosure.

6. A reactor as in claim 1, wherein the enclosure includes spaced apart bars.

7. A reactor as in claim 1, further comprising supports that elevate the enclosure, the supports being spaced apart from each other.

8. A reactor as in claim1, wherein the enclosure is configured to accommodate insertion of a fork of a forklift.

9. A reactor as in claim 1, further comprising a receptacle located outside of the container and in communication with an interior of the container via the discharge port.

10. A method of assembling a reactor, comprising the steps of:

opening a door of a container from a closed condition to an open condition;

placing material to be transformed by heating into at least one enclosure;

passing the at least one enclosure through an open end of the container and inserting the at least one enclosure within the container;

sloping an incline to a discharge port in a floor of the container;

applying a force on the door to press the door against a frame to hermetically seal the container and close an open end of the container with the door, the frame bounding the open end of the container; and

heating the material with at least one heating element within the container.

11. A method as in claim 10, further comprising elevating the enclosure.

12. A method as in claim 10, further comprising using a forklift to move the enclosure in tact with the door of the container in the open condition.

13. A method as in claim 10, further comprising arranging a receptacle outside the container that is in communication with an interior of the container via the discharge port.

14. A method as in claim 10, further comprising recovering heat emerging from the container from the heating by using a water reservoir that at least partially surrounds the container.

15. A method as in claim 10, further comprising maintaining a temperature within the container for periods of time and at sufficient levels that are consistent with forming wood charcoal from wood waste in the enclosure.

16. A method as in claim 10, further comprising filling the enclosure with wood waste as the material before inserting the enclosure, subsequently opening the door after the wood waste is transformed into wood charcoal and removing the enclosure in tact from the container.

17. A method as in claim 10, further comprising transporting the container and the enclosure to a location where there are waste materials, filling enclosure with the waste materials prior to the inserting.

18. A reactor, comprising:

at least one enclosure configured to hold material to be transformed under heat;

at least one heating element configured to supply the heat;

a container that houses the at least one enclosure and the at least one heating element, the container including an open end and a discharge port, a frame that bounds the open end, and a door that is configured to hermetically

seal the open end in response to forces exerted on the door that press the door against the frame, the open end being of a dimension to accommodate passage of the enclosure in tact through the open end; and

an isolation element movable between an open and closed position so that the discharge port is open when the isolation element is in the open position and the discharge port is closed in a hermetically sealed manner when the isolation element is in the closed position, the isolation element being situated beneath the at least one enclosure when the discharge port is closed by the isolation element.